(12) UK Patent Application (19) GB (11) 2 201 886 (13) A

(43) Application published 14 Sep 1988

(21) Application No 8804410

(22) Date of filing 25 Feb 1988

(30) Priority data
(31) 3707977 (32) 12 Mar 1987 (33) DE

(71) Applicant
Bosch-Siemens Hausgeräte GmbH

(Incorporated in FR Germany)

Hochstrasse 17, 8000 Munchen 80,
Federal Republic of Germany

(72) Inventor
Anton Oppel

(74) Agent and/or Address for Service
Dr Walther Wolff & Co
6 Buckingham Gate, London, SW1E 6JP

(51) INT CL⁴
A47L 15/42

(52) Domestic classification (Edition J):
A4F 29A1E3

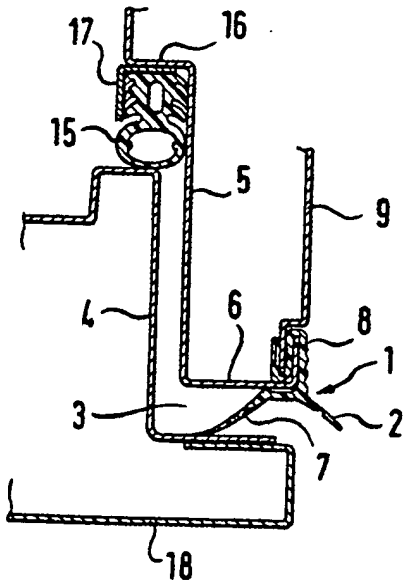
(56) Documents cited
None

(58) Field of search
A4F
D1A
Selected US specifications from IPC sub-class
A47L

# (54) Front loading domestic dishwashing machine

(57) A dishwashing machine comprises a door seal (15) between the machine housing (5, 9) and a door (4, 18) closing an access opening of the housing, the seal being mounted in a groove in the housing and, when the door is closed, sealingly engaging an inner panel (4) of the door, and a closure strip (1) at each of the vertical front edges of the housing, each of which strips has a web (2) for bridging over the gap between the side wall (9) of the housing and an adjacent kitchen cupboard, and a sealing lip (7) extending into the gap (3) between the door inner panel (4) and a front edge portion (6) of the machine housing. Sound insulation is improved thereby.

Fig.2




GB 2 201 886 A

2201886

Fig.1

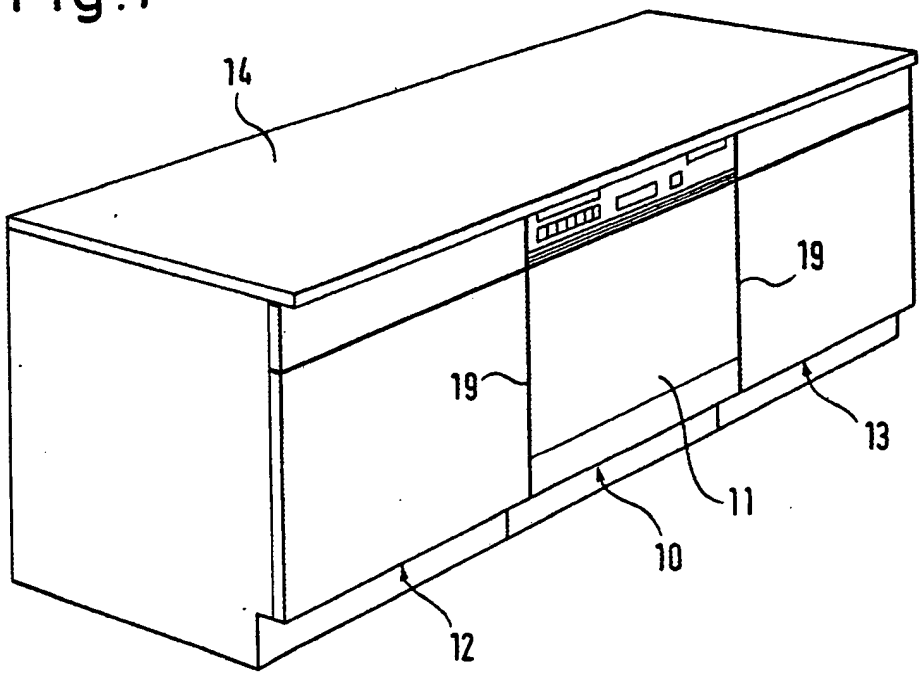



Fig.2

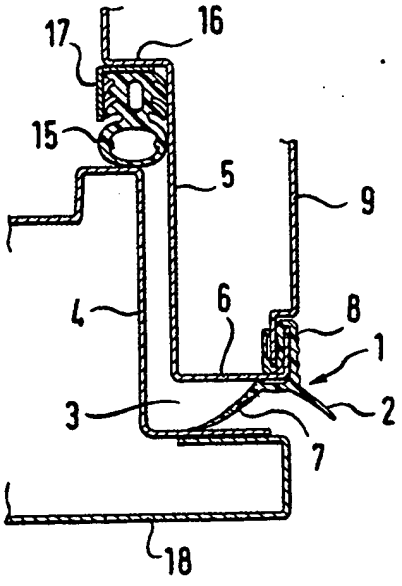
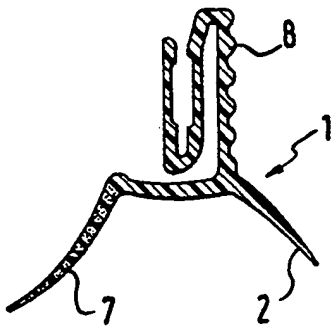



Fig.3



# FRONT LOADING DOMESTIC DISHWASHING MACHINE

The present invention relates to a front loading domestic dishwashing machine, especially a machine which is suitable for installation in a kitchen cupboard line.

On installation of a household dishwashing machine between two neighbouring kitchen cupboards, vertical gaps arise at the adjoining side walls between the machine and the cupboards. These gaps disturb the closed front side of the kitchen cupboard line and also lead to cleaning difficulties. In order to cover these gaps, closure strips of plastics material can be fastened to the front edges of the machine formed by transitions between rinsing container wall members and housing side wall members. These strips can have longitudinal webs which cover or bridge over the vertical gaps between the machine and adjoining kitchen cupboards.

There is scope, however, for improving household dishwashing machines with respect to sound insulation.

According to the present invention there is provided a front-loading domestic dishwashing machine comprising a housing defining an access opening at a front side of the housing, a resilient sealing member extending around the opening, a door to open and close the access opening and sealingly engageable with the sealing member when closing the opening, and a respective closure strip arranged at each of the two upright edges of the front side of the housing and comprising a first lip engageable with a fixture when disposed alongside the housing and a second lip engageable with the door.

In a preferred embodiment, the machine comprises a door seal between rinsing container and the door, which is formed of an outer part and an

inner part, the door seal consisting of an encircling, rubber-elastic profiled sealing member, which is mounted in a groove in the rinsing container that is open towards the door and when the door is closed forms a seal against the inner door part lying thereagainst. A plastics material closure strip is provided at each of the front longitudinal edges of the machine, which edges are each formed by a rinsing chamber wall member and a respective side wall member. Each strip has a web for bridging over the vertical gap between the associated side wall member and a kitchen cupboard disposed alongside. Each closure strip also includes a sealing or barrier lip engaging into the gap between the inner door part and a longitudinal machine edge portion formed by the rinsing container.

Preferably, each strip is fastened by one or more foot parts in a joint between the rinsing container wall member and the side wall member, and the strip together with the web is preferably made of a thermoplastic plastics material with a softly resilient sealing or barrier lip.

Even if the machine is already well insulated in the region of the rinsing container and operates relatively quietly, a noise reduction can be achieved in a simple and economic manner through the barrier lips along the outer door gap, these barrier lips being mouldable onto the strips. When the door is closed, the barrier lip engages into the gap between the longitudinal machine edge and the inner door part and insulates or seals this gap additionally to the provided door seal.

An embodiment of the present invention will now be more particularly described by way of example with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a household dishwashing machine arranged between kitchen cupboards;

Fig. 2 is a horizontal sectional view of part of such a machine embodying the invention, showing sealing arrangements in the region of a door of the machine; and

Fig. 3 is a sectional view, to an enlarged scale, of a closure strip in the sealing arrangements shown in Fig. 2.

Referring now to the drawings, there is shown in Fig. 1 a household dishwashing machine 10 which includes a front door 11 mounted at its lowermost portion above a pedestal recess to be pivotable at the machine housing about a horizontally extending axis. The machine 10 is arranged between, and with its front side flush with, two neighbouring lower kitchen cupboards 12 and 13 and is covered by a worktop 14 which also covers the cupboards.

The dishwashing machine 10 includes a rinsing container side wall 5, which is closable by the door 11, and side walls 9 which are part of the outer housing and adjacent which stand the cupboards 12 and 13. For sealing of the rinsing container 5 in the door region there is provided an encircling door seal 15, which is of rubber-elastic material and mounted in a groove open towards the door 11, the groove being formed by the side wall 5 and an encircling flange 17 welded to a shoulder 16 of the wall 5. The door 11 comprises an outer part 18 and an inner part 4, the inner part 4 being disposed closely against the seal 15 when the door 11 is closed.

For covering the vertical gap 19 between the side walls 9 of the machine 10 and the side walls of the cupboards 12 and 13, a respective closure strip 1 of plastics material or the like is fastened at each

of the two front longitudinal edges 6 formed by the rinsing container walls 5 and the side walls 9. Each strip 1 is held in place by a foot part 8 which is, for example, sprung into the butt joint at the junction of the walls 5 and 9. A web 2, which extends along the closure strip 1 and protrudes towards the adjacent cupboard, bridges over the vertical gap 19.

Each closure strip 1 also includes a sealing or barrier lip 7 of softly elastic material which engages into the door gap 3 between the inner part 4 and the edge 6 formed by the wall 5 and seals off and insulates this gap so that a second sealing and barrier location is provided in addition to that represented by the seal 15.

CLAIMS

1. A front-loading domestic dishwashing machine comprising a housing defining an access opening at a front side of the housing, a resilient sealing member extending around the opening, a door to open and close the access opening and sealingly engageable with the sealing member when closing the opening, and a respective closure strip arranged at each of the two upright edges of the front side of the housing and comprising a first lip engageable with a fixture when disposed alongside the housing and a second lip engageable with the door.

2. A dishwashing machine as claimed in claim 1, wherein each of the strips is made of plastics material.

3. A dishwashing machine as claimed in either claim 1 or claim 2, wherein each of said edges is disposed at the meeting of an external side wall member of the housing with a rinsing chamber wall member of the housing and each of the strips comprises a foot portion held between the wall members.

4. A dishwashing machine as claimed in claim 3, wherein each of the strips is made of thermoplastic plastics material and the second lip thereof is softly resilient.

5. A dishwashing machine substantially as hereinbefore described with reference to the accompanying drawings.

Published 1988 at The Patent Office, State House, 66/71 High Holborn, London WC1R 4TP. Further copies may be obtained from The Patent Office, Sales Branch, St Mary Cray, Orpington, Kent BR5 3RD. Printed by Multiplex techniques ltd, St Mary Cray, Kent. Con. 1/87.